

No Significant Difference And Distance Education

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There are many ways we can examine differences between distance education and face-to-face instruction, but using the idea of no significant difference is probably a mis-directed approach.



In the Pew Learning and Technology Study 'Innovations in Online Learning' authored by Carol Twigg (2001) the issue of no significant difference and equivalent learning outcomes is commingled with the idea of whether distance education is as good as, better, or worse than traditional face-to-face instruction. Here the author has taken a concept, that has been argued by Richard Clark and others in regard to educational technologies, and has applied the idea to the broader topic of distance education. The two issues are not the same.

The no significant difference argument has its roots in educational technologies and as Clark (1994) has argued if we measure learning outcomes through a particular assessment instrument, and the course was designed with the same rigor for both delivery platforms (face-to-face or via technology), then it is likely that the learning outcomes are equivalent. Predominantly this is because we have designed the course to meet the prescribed learning objectives that are tied closely to the assessment questions. This is the basis of what one would call good instructional design. However, as thirty plus years of studies should have demonstrated this is not the right question. It is not whether we can meet the same learning outcomes with technology, but how do we use the technologies to enrich the experience, to go beyond what can be done in the face-to-face or other delivery environment.

In a similar vein asking whether distance education is as good as or better than face-to-face instruction is not the appropriate question. For yes we can prove that the learning gains and outcomes are the same, through systematic testing, but is that truly what we need to determine? Or should we ask more relevant questions, such as what do we value in the face-to-face environment and how can we try to bring this to the students at a distance. There is no doubt that the experience one encounters in class is vastly different than what one encounters at a distance. However, beyond equivalent learning outcomes we must strive to understand what our mission is in delivering a course or courses at a distance.

If we assume that learning outcomes are the same and we say we value human interactions and the aspects of social presence which exist in a class then the real question is how and through what technology can we strive to achieve this for our students. For human interaction and social presence the answer may be video teleconferencing or a mix mode of distance and occasional face-to-face meetings. Or if we are satisfied with what Tait (2000) refers to in the relationships in on-line learning then possibly internet discussion spaces are adequate for a class. Further, if we value interactions with hands-on experiences then do we combine our distance instruction with hands-on experience through partnerships with community colleges or other institutions. The possibilities of how we deliver education at a distance are not constrained by technologies or distance, but from tunnel vision when new technologies are introduced. All too often we abandon proven technologies in response to the latest technology that is held up as the holy grail for education.

Obviously, in all of this I have not addressed the business side or political side of distance education which may drive us in other directions in terms of delivery methods and technology, but for the sake of expression I've set these aspects aside. That said, I would argue that to keep returning to the discussion of no significant difference every time a new technology hits the market is likely a waste of research time that could be better spent pursuing other key questions about what the technology can add or even what it subtracts from the learning environment. To move the field forward we must move beyond this desire to keep proving distance education is as good as face-to-face instruction.

The field must focus on the important questions related to learning at a distance: impact on learning styles; how to engage students in a learning community; the changing nature of social presence in on-line learning; what is important in interactions at a distance; and a host of other critical questions. To ignore these questions and to simply focus on the technologies will lead people to continually question the validity of the practice of distance education.

References

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